DOCUMENT RESUME

ED 109 252 TM 004 716

AUTHOR Breland, Hunter M.; Breland, Nancy S.
TITLE DeFunis vs. Odegaard and Some Inadequacies in Selection Models.
PUB DATE [Apr 75]
NOTE 16p.; Paper presented at the Annual Meeting of the American Educational Research Association (Washington, D.C, March 30-April 3, 1975)

EDRS PRICE MF-$0.76 HC-$1.58 PLUS POSTAGE
DESCRIPTORS Admission (School); *Admission Criteria; Bias; Civil Rights; Competitive Selection; Court Litigation; Evaluation Criteria; *Law Schools; *Minority Groups; *Models; Prediction; Professional Personnel; *Psychometrics
IDENTIFIERS *Defunis v Odegaard; University of Washington Law School

ABSTRACT

Selection fairness is explored in the context of data from DeFunis v. Odegaard, the recent Supreme Court case, and societal demands for increased numbers of minority professionals. These models of selection fairness are considered: Clary's regression model, Darlington's subjective regression model, the equal risk model of Einhorm & Bass, Thorndike's constant ratio model, Cole's conditional probability model, and a new decision-theoretic utility model. Some formulations offer defensible theoretical positions, but all fail to provide a suitable basis for satisfying societal demands. It is concluded that all of these models would function better if the predictor were modified to include nonacademic measures. (Author)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED109252

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

TM 004 716

DEFUNIS VS. ODEGAARD

AND SOME

INADEQUACIES IN SELECTION MODELS

Hunter M. Breland

Educational Testing Service

and

Nancy Schacht Breland

Trenton State College

Paper presented at the Annual Meeting
of the American Educational Research
Association, Washington, D.C.,

April 2, 1975

DEFUNIS VS. ODEGAARD

AND SOME

INADEQUACIES IN SELECTION MODELS

Hunter M. Breland
Educational Testing Service

and

Nancy Schacht Breland
Trenton State College

Introduction

In 1971, Marco DeFunis, a resident of the State of Washington, applied for admission to the University of Washington Law School and was not admitted. He had also been refused admission in the previous year. Following his second rejection, he brought suit against the University of Washington on the grounds that other persons with lesser qualifications had been admitted. A peripheral issue was his residency in the State of Washington, since many of those accepted were from out of state. DeFunis was also a graduate of the University of Washington where he had accumulated a grade point average of 3.71 out of 4 and had been elected to Phi Beta Kappa. He had been admitted to two other law schools outside of the state of Washington, but preferred to remain at the University of Washington because his wife had an excellent job in that area and it was not certain whether a similar job could be obtained if they were to move. DeFunis had taken the Law School Admission Test (LSAT) three times with scores of 512, 566, and 668.

Following trial in the Superior Court of the State of Washington, the Court ordered that DeFunis be admitted to the University of Washington Law School in the class beginning in September, 1971. The

Court held that the procedures by which DeFunis had been excluded were in violation of the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution. This opinion was argued on the grounds that, because of a special minority admissions program, a part of the class had been reserved for certain ethnic groups, thus reducing DeFunis' chances of being admitted since he was not a member of any of these groups.

DeFunis began his legal studies at the University of Washington Law School, as ordered by the Court, in September of 1971. Subsequently, the University appealed to the Washington Supreme Court, and the judgment of the Superior Court was reversed. By the time of the Washington Supreme Court ruling, DeFunis was in his second year of legal studies. He then petitioned the Supreme Court of the United States so that he could remain in law school and obtain his degree. To allow him to remain in school while his case was being deliberated by the high court, Justice William O. Douglas granted DeFunis a special restraining order. DeFunis was registering for his final term when his case was orally argued before the Supreme Court. By the time of the Court's written opinion of April, 1974, it appeared that he was certain to receive his J.D. degree within two months regardless of any decision the Court might reach. The Supreme Court therefore decided not to decide, but to declare the case moot.

Admissions Procedures of the Washington Law School

Applicants for admission to the law school were required to have an undergraduate degree and to have taken the Law School Admission Test. They were also required to submit with their applications copies of transcripts from all schools and colleges attended, statements from their undergraduate dean of students, and letters of recommendation from their undergraduate faculty members. Additional statements and letters of recommendation could also be submitted. Although the admissions process did not include personal interviews and did not reveal whether applicants were poor or affluent, each applicant was given the option of indicating his dominant ethnic origin on the application form.

In assessing applications, the admissions committee first attempted to identify applicants who had potential for outstanding performance. This initial identification of outstanding performance was made not only on the basis potential contributions to law school classes but also on the basis of probable contributions to society at large. To provide a preliminary ranking of applicants, an index called the Predicted First-Year Average (PFYA) was used. The PFYA was computed by combining, in a multiple regression equation, the LSAT score (or an average of LSAT scores if it had been taken more than once), a writing score obtained on the same day the LSAT was administered, and the junior-senior college grade point average. For applicants with a PFYA of 77 or above, each file was assigned to a member of

the admissions committee for thorough review and for presentation to the full committee. The chairman of the admissions committee reviewed all applications with PFYA's below 74.5 and made a judgment, based on other information in the applicants file, as to whether the PFYA adequately represented the applicant's potential. Cases in doubt were reserved for committee review, but all other applicants with PFYA's below 74.5 were normally rejected.

Two special groups were given special consideration if their PFYA's fell below 74.5. First, all persons who had previously been admitted to the school--but who were unable to enter at that time for some reason such as military service--normally had a right to reenter. Second, all files of minority applicants were considered by the full committee. Minorities were defined as applicants who had used the optional space on the application form and who had indicated that they were predominantly of any of the following four ethnic origins: Black American, Chicano American, American Indian, or Philippine American. Although the state of Washington has a large population of Asians who are not of Philippine origin, these were not considered as minorities.

Applicants with PFYA's between 74.5 and 77 were accumulated for consideration at a later time along with some applicants having PFYA's above 77--but for whom the committee wished to defer judgment--and the minority applicants with PFYA's below 74.5. This residual group of applications was then divided among the members of the admissions committee for further consideration. The minority applications were never considered competitively with the non-minority

applications, although they were considered competitively within the minority group. In reviewing the minority applications, less weight was given to the PFYA.

In 1971, the Law School received 1,601 applications for admission to the class beginning in September, 1971. The number of applicants had increased steadily since 1967 when only 618 applications had been received. In 1968 there were 704, in 1969 there were 860, and in 1970 there were 1,026. Despite the increasing number of applications, the number of seats available in the first year remained essentially constant between 145 and 150. In 1971 there were 150 seats, but considerably more than 150 applicants were accepted since all would not enroll. As of August, 1971, 275 students had been given notice of acceptance and an additional 55 were placed on a waiting list. Of the 275 accepted, 37 were members of one of the four ethnic groups considered to be minorities. Ignoring the waiting list, out of a total of 1,531 non-minority applicants, 238 were accepted in the group of 275. Thus, the acceptance rate for non-minorities was 15.5% (238 of 1,531). Since only 70 minorities had applied, the acceptance rate for minorities was 52.9% (37 of 70).

Only one of the 37 minorities accepted had a PFYA higher than DeFunis (who had a PFYA of 76.23) and 30 of the 37 had PFYA's below 74.5. There were also 48 non-minority applicants admitted with PFYA's below that of DeFunis, but 23 of these were returning veterans who had previously been admitted or who had withdrawn from the school. The other 25 were considered to have merits beyond their numerical

averages.

DeFunis was among the 55 on the waiting list, but ranked in the lower quarter of it. He was ultimately informed that he would not be admitted, and it was at this time that he commenced the litigations. In defense of its policies, the University of Washington argued that even if there had been no special minority admissions DeFunis would still not have been admitted. He was so far down on the waiting list that moving him up by 37 places in rank would still not have been sufficient to put him in the admitted group. But beyond the question of fairness to DeFunis, there is the question of fairness to the non-minorities in general. Is it possible that non-minorities, other than DeFunis, would have been admitted if a different set of procedures had been followed? Certainly this was true, and it is this kind of argument that most likely will be used in future cases similar to the DeFunis case.

Psychometric Models and the DeFunis Case

In Breland (1974) and Breland and Ironson (1974) psychometric models were applied to the data in the DeFunis case. In Breland (1974), the model proposed by Cole (1973) was applied under the assumptions of four hypothetical situations. Even under the most liberal assumptions, the conditional probability model of Cole yielded only 15.8 % minorities (rather than the 52.9% actually admitted) admitted. The Cole model would have required 240 minority applicants in order to obtain 37 minority admissions. Breland and Ironson (1974) applied the DeFunis data to other psychometric models, including the constant

ratio model of Thorndike (1971), the equal risk model of Einhorn and Bass (1971), and the regression model of Cleary (1968). None of these models admitted as many minorities as the conditional probability model, and the last two would have admitted almost none.

Limitations of Present Psychometric Models

With the exception of models like those proposed by Darlington (1971), Petersen and Novick (1974), and Petersen (1974), none of the available psychometric procedures yield a sufficient number of minority admissions to satisfy the kinds of demands suggested by the DeFunis case. That similar societal demands are widespread is clear from the number of selection-related litigations now in progress. One case, Bakke vs. The Regents of the University of California, is believed to be paralleling DeFunis (see New York Times, January 16, 1975). In this case, it was revealed that the Medical School at Davis had reserved 15 of 100 available seats in 1973 and 1974 for "disadvantaged" applicants. But white applicants who claimed to be disadvantaged were not given any of the special reserved seats. It is expected that the Bakke case will end up in the Supreme Court and that mootness is an unlikely outcome.

Although the Darlington and Petersen approaches, which allow for an explication of values in the psychometric procedure, could provide a means for increasing minority enrollments through some rational means, they would be subject to the same legal arguments made in both DeFunis and Bakke. The issue is not one of being more precise in stating the values of admissions committees, but one of what kinds of values are constitutional and what kinds are not.

Therefore, the legal problem is not solved by having universities state their utilities precisely if those utilities unlawfully discriminate in violation of the Constitution. Several limitations of present psychometric models are clear:

1. They provide for insufficient minority admissions. With present application rates of minorities, none of the non-subjective models allow the number of minority admissions that American society is demanding.

2. They force admissions committees toward invalid procedures. In their efforts to meet the societal demands, admissions committees must turn away from reliable and valid psychometric measures to other devices well-known to be both unreliable and invalid. Letters of reference, interviews, and other file folder information--while useful in making selection decisions--were never intended to play a dominant role in selection.

3. They Ignore the Classification Problem. A prominent issue in the legal arguments over minority admissions is that of classification or identification of persons. What is a minority? In DeFunis, minorities were persons who: (a) chose to indicate their ethnic origin on an application form, and (b) marked one of four ethnic origins--Black American, Chicano American, American Indian, or Philippine American. Who is disadvantaged? In Bakke, disadvantaged persons were those who claimed to be disadvantaged--provided they were not white. The models tend to assume that persons may readily

be grouped into minority and majority groups and then some differential treatment performed. One model that does not have this requirement in all of its applications is that of Darlington (1971) when an index such as SES is inserted into the model. But the problem then is that SES is not the appropriate index and no index is available that can be applied equitably across all cultural groups.

4. They Assume That the Criteria are Adequate. Criteria such as first-year law school grades are limited in that they are unreliable and possibly biased. Moreover, criteria are needed that represent a longer range of focus and that are more specifically related to predictors. In recognition of the fact that there are many different kinds of lawyers and law activities, there would appear to be a need for multiple criteria and multiple predictors to relate to them.

5. They Rely Heavily on Correlation Coefficients. Correlation coefficients are often misleading, but admissions officials and lawyers tend not to be aware of this problem. In regression models, the low utility of the intermediate range of selection ratios is often ignored. That is, the Taylor-Russell tables are not usually a part of regression model applications. Additionally, the weights in regression equasions are set by psychometricians independent of the values of admissions committees. Finally, most models assume that predicting who will be the best students or best professionals is the only consideration that should go into a selection decision. Other kinds of valued outcomes, such as the climate created in the

school by the kinds of applicants selected and the probable career orientations of applicants, are ignored by the performance prediction assumption.

6. Most of the Present Models are too Esoteric. Given that selection procedures are likely to be involved in litigations, it is essential that whatever models are devised be understandable by lawyers, judges, and others not having sophisticated psychometric expertise.

7. They Assume that the Instruction is Appropriate. Models that rely on grades as the only criterion assume that those grades were obtained in a setting appropriate for all students. Instructional research suggests that different kinds of instruction may be optimum for different kinds of students.

Some Possible Solutions

Since the limitations of the present psychometric models tend to force admissions committees toward a heavy use of unreliable and invalid indicators (letters of reference, interviews, and other file folder information), it is important that new procedures be developed to encourage more use of psychometrically defensible practices. Some possible approaches are:

1. Obtain More Minority Applications. If more applications from minorities and other disadvantaged individuals could be obtained, then less severe procedures would provide adequate numbers for admissions. This is already occurring as evidenced by figures from the Bakke case. In 1973, 297 minority group members applied, but in 1974 the number

had increased to 628.

2. Tutoring. There is some evidence that training in the fundamentals contained in admissions tests can help to raise scores of persons with less adequate educational backgrounds (Evans and Pike, 1973). Of course, the more ambitious have always worried somewhat about tests and expended considerable energies in preparing for tests. There also appears to be a trend in measurement toward more coachable kinds of tests, such as the new Test of Standard Written English in the SAT.

3. Multiple Criteria and Predictors. As noted in the discussion on limitations of present models, the present reliance on first-year law school grades as a single criterion and use of only grades and LSAT scores to predict this single criterion is unfortunate. And yet other useful criteria are difficult to find. If long term criteria are to be used, a lengthy research effort will be required. A beginning can be made by developing new predictors so that a wider range of abilities and other individual attributes can be assessed. If an inventory of predictors were available, then individual law schools could choose those considered most relevant to particular instructional styles and objectives. In this way, the schools would be explicating their values by the choices they make. Further explications of values might occur through having the law schools (rather than psychometricians) specify the weights to be used when combining measures. Or, the law schools might decide to use each of the measures independently in a multiple cut-off procedure.

4. Achievement Gradients. Rather than considering only a measured level of achievement occuring at a single point in time, it may be important to have more than one measurement at more than one time to establish achievement gradients. This could be especially important to those who have begun their educations poorly, but whose motivation results in a steep ascending gradient. This kind of analysis is, of course, attempted implicitly by admissions committees, but one suspects that they actually have very little information to work with.

5. Knowledge of the Law. Another way of assessing motivation for study in a particular area is to determine what is already known by an applicant. Such measures would be completely contrary to the traditions in law school selection which have purposefully avoided testing specific knowledges. One reason for that policy was to make application procedures fair across disciplines (e.g., engineering students might not compete well with political science students). But if the legal knowledge is not a requirement, but is considered as only one path to admissions, then it would simply be an option that engineering students would not choose.

6. Alternate Methods of Instruction. Alternatives to the case method of instruction, the method frequently used in the first year of law school, might be employed. Use of programmed instruction or mastery techniques, for instance, could change the distribution of first year law grades. Such alternate methods could provide all students with non-competitive, remedial instruction in areas of individual deficiency, and could improve the habits of students with

weak study skills.

Conclusions and Summary

The admissions procedures used at the University of Washington Law School, the focus of the recent Supreme Court case of DeFunis vs. Odegaard, would not be fair as judged by most existing psychometric models. And yet those models fall far short of satisfying societal demands for increased admissions of minorities. Since the models are inadequate for their needs, admissions committees turn toward a heavy use of unreliable and invalid letters of reference, interview data, and other file folder information. To encourage a return to more use of psychometrically defensible practices, it is proposed that a number of steps be taken. These steps include encouraging more minority applicants, tutoring in the fundamentals contained in tests as well as in test-wiseness, developing more criteria, developing more predictors, having law schools explicate their values by choosing and weighting predictors they consider important for their instructional setting and goals, the use of multiple cut-offs rather than combining measures in regression equasions, using competency-based quotas, measuring achievemet gradients as predictors, and providing alternate methods of instruction.

References

Breland, H. M. DeFunis revisited: A psychometric view. Paper prepared for the Law School Admission Council, Princeton, New Jersey: Educational Testing Service, August, 1974.

Breland, H. M., and Ironson, G. H. DeFunis reconsidered: A comparative analysis of alternative admissions strategies. Princeton, New Jersey: Educational Testing Service, 1974. (To appear in the Journal of Educational Measurement)

Cleary, T. A. Test bias: Prediction of grades of Negro and White students in integrated colleges. Journal of Educational Measurement, 1968, 5, 115-124.

Cole, N. S. Bias in selection. Journal of Educational Measurement, 1973, 10, 237-255.

Darlington, R. B. Another look at "culture fairness." Journal of Educational Measurement, 1971, 8, 71-82.

Einhorn, H. J., and Bass, A. R. Methodological considerations relevant to discrimination in employment testing. Psychological Bulletin, 1971, 75, 261-269.

Evans, F. L., and Pike, L. W. The effects of instruction for three mathematics item formats. Journal of Educational Measurement, 1973, 10 (4), 257-272.

Petersen, N. S. An expected utility model for "optimal" selection. (Unpublished manuscript, University of Iowa, 1974).

Petersen, N. S., and Novick, M. R. An evaluation of some models for test bias. ACT Technical Bulletin No. 23, Iowa City, Iowa: American College Testing Program, 1974.

Thorndike, R. L. Concepts of culture-fairness. Journal of Educational Measurement, 1971, 8, 63-70.